



Pathways or Goat Tracks – Non-ATAR University Entrance

Megan O’Connell, Aarushi Singhania, Maci Hamdorf and Ciannon Cazaly 2022

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Megan O’Connell, RMIT University

Aarushi Singhanian, RMIT University

Maci Hamdorf, RMIT University

Ciannon Cazaly, RMIT University

National Centre for Student Equity in Higher Education

Tel: +61 8 9266 1743

Email: ncsehe@curtin.edu.au

ncsehe.edu.au

Building 602 (Technology Park)

Curtin University

Kent St, Bentley WA 6102

GPO Box U1987, Perth WA 6845

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Table of Contents

Executive Summary	1
Recommendations	4
Introduction	6
Background	8
Tertiary Education policy	8
Equity policy	8
Careers and Transitions	8
What helps students find pathways to higher education?	9
Career Education and Workplace Engagement	9
Timing	10
Quality and variety of information	10
Pathways knowledge	10
Pathway Programs	11
What do alternative pathway programs to university offer?	11
How do alternative entry programs to university support young people?	12
Methods	14
Focus Groups	14
Findings	17
Career Aspiration	17
Perceived level of tertiary education required	17
Pathway intentions	19
How young people find out about careers and pathways	20
Knowledge of alternative pathways	22
Effectiveness of information	24
What we need to do differently	25
Timing of information	26
Involve parents in discussions – and showcase success through VET and alternative pathways to university	27
Build access to warm knowledge	27
Discussion	28
Conclusion	35
References	37

List of Tables

Table 1. Focus group demographics	15
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List of Figures

Figure 1. Career aspirations	17
Figure 2. Skill requirements of career	19
Figure 3. Young people's intentions regarding university and VET/TAFE	20
Figure 4. Young people's ranking of helpfulness of people and resources - % highest rank	21
Figure 5. Young people's ranking of industry and education influencers - % highest rank	22
Figure 6. Effectiveness of information on school to university transition	25
Figure 7. Ideal understanding of careers and transition.....	30

Abbreviations

ACARA	Australian Curriculum, Assessment and Reporting Authority
ATAR	Australian Tertiary Admission Rank
DESE	Department of Education, Skills and Employment
HEPPP	Higher Education Participation and Partnerships Program
RMIT	Royal Melbourne Institute of Technology
SES	Socioeconomic Status
TAFE	Technical and Further Education
VET	Vocational Education and Training

Executive Summary

This project contributes to filling the gap in how young people find out about pathways into further education and future careers, including alternative non-Australian Tertiary Admission Rank (ATAR) pathways into university and pathways to vocational education. It brings to the fore the critical role of significant others, including parents and carers. The report finds that young people and their significant others need exposure to a range of success stories to see the multitude of pathways possible as equal.

The report is situated in a changing landscape for young people. Young people are making multiple transitions between education and work, and mismatches between skill levels and chosen occupations are prevalent.

We hypothesised that young people from some equity groups – particularly those that are in a larger group of equity students such as those attending a school in a low socioeconomic status (SES) area – would be more likely to receive information about alternative pathways into university than young people who are isolated from their equity group peers. This includes ways to university through vocational education and enabling programs. The project defines non-ATAR pathways into university as alternative pathways, despite the growth in university entrance through means other than ATAR. ATAR-based entry remains the primary access path for students entering university from secondary education.

As we proceeded with the project, a second hypothesis arose – that young people need a combination of three types of information to make a smooth transition from school to university or vocational education. They need to understand their skills and aspirations, their intended career/s, and the range of pathways they can take. We learned that parents and carers also need this information – in particular, to hear first-hand pathway success stories.

The project was conceived before the advent of COVID-19, and the challenges of the pandemic impacted the primary data collection for this work. Nevertheless, the research provides critical insights and reveals gaps in young people's career awareness and how they find out about pathways. It also offers clear implementable changes to the current careers ecosystem and transition information and advice to support students in building awareness of how their interests link to careers and corresponding study pathways.

We surveyed 58 students and held focus groups with 14 students across various jurisdictions – in Western Australia, South Australia, Victoria, and New South Wales. Regardless of jurisdiction, we found similarities in what helped young people to gain knowledge of pathways and the roles played by families, schools, and universities.

Our research affirms and adds to the existing research base about pathways and transitions. Ideally, all young people would finish school with a sense of:

- what they like and are good at
- careers they might wish to pursue and
- course and pathways that lead to their chosen destination, and an ability to navigate between different options.

Of our respondents, young people who understood all three were most confident of their future and most likely to know about alternative pathways that would lead to their career goals. The young people most satisfied in their career ambitions and paths were those who successfully integrated information from their social or work network, parents, school, industry, and higher education providers to validate their choices. Some young people also benefited from workplace experiences.

Even within this group, understanding of different pathways was limited. Given how many alternative pathways are available, it is perhaps not surprising that the young people we

surveyed express little knowledge of these, beyond the confidence from some that they could find another path if direct entry to their preferred course did not work out. When an alternative pathway was known, it was usually a vocational education and training (VET) to university pathway as a backup option rather than a primary path.

Our respondents valued personal information the most – talking to trusted peers, parents, or workmates or engaging in workplace activities. This was referred to as hot knowledge (Smith, 2011). By contrast, cold knowledge, for example, websites or more generic information sessions or open days with limited opportunities for personal engagement, were perceived as less helpful.

Focus groups confirmed the literature around the importance of hot knowledge. Young people with a trusted advisor – be it a sibling, a co-worker, or a parent, were more likely to have a clearer sense of their future pathway. Some young people validated this knowledge with others, including career advisors, and used it as a springboard to conduct their research, including reaching out to tertiary institutions they were familiar with.

While most young people surveyed were satisfied with the information they had to pursue their pathways, a small group were not. In unpacking this further through focus groups, we found that nearly all young people identified a need for more information on jobs and pathways and information earlier in their secondary education or during primary school. Young people spoke of how jobs were discussed in kindergarten when parents visited to talk about what they do, but this did not continue into primary school.

Respondents spoke of career advice, usually starting in the senior years and often focused on subject selection. They wanted to hear more about industries and experience workplaces earlier in their schooling. Very few had the opportunities to experience workplaces; the exception being students streamed to vocational pathways. With this came the expectation that these streamed students would pursue a narrower range of occupations.

The report adds to the existing but scant evidence around the potential role of warm knowledge to “level the playing field” for young people who lack access to trusted advisors on possible careers and pathways. Our participants suggested access to warm knowledge, for example, targeted information sessions with former students currently in university, and alumni returning to schools to talk about pathways with interested young people, would help bridge a gap in access to knowledge and support. Young people are comfortable in trusting people like them providing information even if they need to form new relationships to receive this information; for example, by connecting with a university student at an open day. They are far more receptive to this information than information received *en masse* or from a less relatable source.

Our research confirms the dominance of the ATAR as a measure of success and the means to enter university, with most participants intending to get an ATAR and go to university regardless of their career choice. Many expected and felt compelled by parents and their schools to complete school and transition to university through a linear pathway. They were often unaware that different paths exist and that many young people enter university through other means. Only a minority of participants were aware of alternative pathways to university or expressed a desire to complete a vocational path in its own right.

In our research, knowledge of alternative pathways to university was limited to some groups of young people. Some found out about alternative routes through a university visiting their school. This was likely where a university was reaching out to an equity group – for example, a school with many refugee young people. Alternatively, an Indigenous young person in a mainstream academic program, or a young person with a mental health condition, were less likely to know of alternative pathways to university even though they could equally benefit from this knowledge. They were also less likely to know about the ATAR and to have a strong sense of their future career.

Young people in our study who had a significant person (family or friend) with lived experience of pathways, a trusted career advisor, or who were targeted by universities due to their equity status were likely to know something about different pathways. However, many were unable to source up-to-date, relevant information from their parents or peers, nor to engage in workplace learning – pointing to a need and opportunity to support parents and young people to understand the range of pathways on offer that may lead to university or VET.

Parents continue to have a primary influence on young people's pathways. However, many young people in our study found that their parents did not understand how alternative pathways into university or careers work and could only provide a narrow range of advice. Parents' primary point of reference was their own school experience – their understanding of ATAR was limited, but it was still held as the primary goal students were urged to meet.

Study participants suggested that parents and students need to hear first-hand success stories from former students who have taken alternative pathways to normalise these as a "safe" option, rather than only as a second chance alternative.

Our report proposes simple changes that would make a tangible difference to young people's understanding of pathways, including utilising peers to convey pathways information. This should include prioritising the dissemination of success stories who achieved non-ATAR pathways into university and pathways available within and through vocational education and training, as these are currently less visible to young people and their parents.

While it is not possible to convey information on all the paths available, the availability of a range of different options for entering industry, TAFE and university can be conveyed at large. Young people and their families can learn that a range of pathways can be further explored, depending on a student's skills, motivations, and career interests.

Young people are challenged to find out about alternative pathways to university and careers if they do not have a firm understanding of what they like and are good at and potential careers. Career information needs to start early, be integrated across the curriculum, and draw on relatable peers to showcase a broader range of successful pathways to young people and their families.

Recommendations

The findings of this project confirm that knowledge of careers and pathways, including alternative pathways, is limited to some groups of young people. Many young people cannot source up-to-date, relevant information from the most trusted sources. We need to start career exploration early and showcase success through a range of pathways to students, and importantly their parents and carers. Young people who understand their skills and interests, have engaged in workplace learning, and can find and navigate pathways will be well placed to transition from school to their next destination and ultimately to a career.

Young people in our study had very clear recommendations for schools, education providers, and governments about how to improve things:

Recommendation 1) Career education should be prioritised in the curriculum, with resources allocated to mainstream career learning across subjects in addition to supporting dedicated career practitioners.

All young people benefit from a range of workplace engagement, hearing from other young people in industry, trying different skills at school, and visiting workplaces. By starting workplace learning sooner, more young people would identify what they like and are good at and explore a range of pathways.

Greater linking of subjects to careers and support to engage in workplace learning would provide young people with insights into how their skills and interests link to jobs. They could then use this information to find pathways.

This approach requires prioritisation of career education in the curriculum and resourcing to support all teachers to include career-related learning in their subjects in addition to ensuring every young person can access a trained career practitioner.

Recommendation 2) Schools should draw on alumni and industry peers to provide relatable information to young people.

Linking to the importance of hot knowledge, our study suggests that warm knowledge, delivered by people like them but not immediate peers or family members, would support young people in making more informed decisions about their future pathways. The young people suggested having people like them, recent school leavers in industry, TAFE, or university, return to school and host talks to demystify these destinations and provide information relevant to future careers and pathways. They felt that recent school leavers, rather than university lecturers, would be more relatable and be able to share information on what the transition feels like and what to expect in tertiary education. This could have an added benefit in increasing preparedness for further studies.

Recommendation 3) Schools have a pivotal role in building parents' and carers' knowledge and understanding of alternative pathways from school to further education by showcasing a range of student success stories.

Warm knowledge may help to educate parents and demystify alternative pathways. Parents and carers continue to have a primary influence on young people's pathways. Many young people in our study aspire to careers held by parents and other family members and are strongly encouraged and led by their advice. However, many found that their parents or carers did not understand pathways into university and a range of careers or provided them with a narrow source of advice.

Parents and carers need to be part of the career information conversation to learn how school and careers are changing. They would benefit from exposure to greater knowledge and understanding of alternative pathways.

Showcasing alternative pathways success stories was seen as crucial, as parents and carers need to see that all pathways are safe to support their children to pursue them. Young people in our study point to the need to “sell” the success of alternative pathways. They felt that if students who had achieved success in alternative pathways could return to their school and speak to students and parents, this would expand understanding and relieve parent fears about alternative pathways. This could help reframe pathways from being a second chance “alternative” to a different, equal manner for young people to achieve their career goals.

The young people we heard from suggested that COVID-19 related pivots to remote learning had shown that parents and carers could be more readily engaged remotely than at a school event. This could be part of the solution to engaging parents reluctant or too time-poor to step into a school. Providing online sessions could allow schools to engage parents and carers after hours in career conversations and hear from students who achieved success in different paths.

Recommendation 4) Universities should personalise their information by utilising peers and technology to support personalisation and connection.

The young people surveyed commented that technology could expand the reach of universities. Young people in focus groups had at most spoken to representatives from a single university, which was the closest university and most often in a partnership or outreach arrangement with the school. They suggested alternatives to enable more universities and more faculties to reach them effectively.

Universities and TAFEs should draw on existing students to provide warm knowledge to young people to help them understand pathways. All students in our study suggested having people like them, recent school leavers in TAFE or university, demystifying what these destinations are like and providing information relevant to future careers and pathways.

University students from various faculties would ideally host open forums where interested young people could drop in and hear about pathways from people like them rather than navigating university websites or hearing generic university information in open days. Based on our research, young people are seeking personalised information – to be able to reach out to people like them and to hear success stories from students. They find the current broad information sessions to be disempowering and overwhelming. Open days are preferred where students know and attend these and can talk to current students one-on-one. Some universities provide mentors to outreach high schools, which provide a vital link and source of information.

Introduction

This project is situated during a time of immense workplace change and upheaval. Despite the pandemic causing staffing shortages, most occupations continue to require a vocational qualification or a university degree (Australian Government, 2021). Secondary education is no longer the baseline young people need. This changing labour market means all young people need to navigate a broader range of information and influences available to them in deciding which pathways to choose upon finishing their secondary schooling.

Young people are no longer moving smoothly from school into their careers, with many moving between work, vocational education and higher education multiple times before the age of 24 (DESE, 2019). There is uneven access to the knowledge necessary to identify the range of pathways young people can choose to pursue their career ambitions. Earlier research highlighted a lack of knowledge about different pathways to university despite solid growth in non-Australian Tertiary Admission Rank (ATAR) pathways driven by non-school leaver entry (Harvey et al., 2016; O'Connell, Milligan & Bentley, 2019). This research looks at school student awareness of alternative pathways, particularly non-ATAR university pathways. It discusses changes to career education and university outreach to support greater understanding and take-up up a range of pathways.

Education is crucial to enabling young people to succeed in the labour market, combined with health and wellbeing outcomes (Lamb & Huo, 2017). There are lifelong consequences for young people who do not complete school and do not transition to work or further education. Around one in four young people in Australia are not fully engaged in education, employment, or training at the age of 24. Around 45,000 of these 24-year-olds, each year, are estimated to remain disengaged for most of their working lives (Lamb & Huo, 2017).

Over the last fifteen years, national reviews and subsequent strategies have recommended and resulted in targets for school completion among specific equity groups, including students from low socioeconomic status (SES) backgrounds, Indigenous students, and students from rural and remote locations. National partnerships were introduced as a federal-state reform vehicle to pursue school completion targets. They resulted in increases in completion rates from 64 per cent in 2009 to 79 per cent in 2018, before falling to 73 per cent in 2019 (Australian Curriculum, Assessment and Reporting Authority, 2019). The Bradley Review (Bradley et al. 2008) recommendations around equity targets in higher education were introduced. Despite this focus, inequity in school completion and tertiary education remains.

A range of research has been conducted into the barriers to higher education for young people from low SES backgrounds, first-in-family students, Indigenous students, and students with a disability (Pitman 2016, NCSEHE, 2016; Smith 2011, King et al. 2015). These barriers include economic and financial concerns, lack of educational preparedness, and low self-efficacy and knowledge (NCSEHE, 2016). Despite a range of targeted policies and programs, young people from equity backgrounds continue to be underrepresented in higher education.

This project contributes to filling the gap in the knowledge about how young people find out about careers and pathways, including alternative pathways to university, what might work to ensure more young people can understand what they like and are good at, and corresponding careers and pathways.

We hypothesised that young people from some equity groups, particularly those in a larger group of equity students, such as those attending schools in low SES areas, are more likely to receive information about alternative pathways than young people who are isolated from their equity group peers. This builds on research that indicates young people from some groups, for example, low SES groups, are more likely to be targeted by universities and

enter universities through alternative means (Harvey et al., 2016; O'Connell, Milligan & Bentley, 2019).

As we proceeded with the project, a second hypothesis arose; that young people with a combination of three types of information are more likely to make a smooth transition from school. Young people would benefit from support to understand their skills and aspirations, their intended career/s, and the range of pathways they can take. This hypothesis dovetails with the first hypothesis.

This report commences with a summary of the policy landscape regarding initiatives to support young people to complete school and transition to tertiary education, including changes to the tertiary education landscape to promote equity.

Following this is a review of the literature on young people's transitions, including aspirations and career education, before focusing on the higher education landscape and literature around pathway programs. The review concludes that, despite a good understanding of how young people find out about post-school pathways, this has not been differentiated by equity groups to provide a nuanced understanding of how different equity groups find information or how some young people can find out about and utilise alternative pathways.

The report includes an outline of the mixed methods approach to our data collection: 1) surveying school students to develop an understanding of the challenges for young people learning about alternative pathways and the differences and similarities with equity cohorts, and; 2) focus groups which delved more deeply into how young people get insights into the world of work, and decide on careers and pathways.

The report includes voices, hopes, insights, and recommendations from the young people who participated in this study. These helped to shape the final report recommendations. The support of project collaborators, schools, and young people has enabled us to develop clear recommendations of differing complexities to implement.

These recommendations, in brief, are to:

- provide dedicated funding to support starting early with career learning, providing access to career education to every young person in secondary school and integrating career learning across the curriculum
- involve parents and significant others in career learning to expand the knowledge base of young people's chief confidantes
- draw on peer experiences to enable all young people to receive knowledge in a manner they can relate to and trust.

If implemented, such recommendations would significantly support young people to learn what they like and are good at, investigate future careers, and understand the range of pathways to achieve their goals. Combined, these recommendations would create a greater understanding of, and equity of access to, the multitude of pathways available for young people to achieve their ambitions.

Background

Tertiary Education policy

Supporting young people to complete school and transition successfully to tertiary education or employment has been a focus of Australian governments for several decades. In 2009, a range of initiatives was funded through the National Partnership on Youth Attainment and Transitions. Under this national partnership, jurisdictions successfully increased the school leaving age and implemented a range of initiatives focused on re-engaging young people in school, providing young people with work experience, and improving career advice, with the aim that more young people would finish school and go on to further education, employment, and training. During the period of the national partnership from 2009 to 2013, secondary school completion rates initially rose, then declined in 2014 and again recently (Australian Curriculum, Assessment and Reporting Authority, 2021). A decade later, the 2019 Mparntwe Declaration set the national vision and goals for education in Australia (DESE, 2019). It emphasises lifelong learning and includes partnerships with training providers, employers, and industry as a part of senior secondary education. The declaration signals the importance of work experience and career education for young people and highlights the need to embed pathways for learning throughout a person's life (DESE, 2019).

The 2020 Shergold Review of Senior Secondary Pathways into Work, Further Education and Training argued the need to support all young people to make a smooth transition from school to a post-school destination, with new initiatives such as the National Career Education Strategy and accompanying Future Ready career resources aimed at supporting schools to provide career education (Education Council Australia, 2020).

There is growing recognition of the need to integrate career education and workplace learning across the curriculum and have a more streamlined transition from school to post-school destinations. However, achieving this on scale remains a challenge – and is perhaps more difficult because of the myriad of potential pathways and transitions young people can make.

Equity policy

The 2008 Bradley Review of equity in higher education (DESE, 2021) set new targets for higher education participation. It inspired the establishment of the Higher Education Participation and Partnerships Program (HEPPP) to support participation by equity cohorts over four phases:

Pre-Access: Outreach to Schools and Communities

Access: Pathways and Admissions (including Enabling Pathways)

Participation: Transition, Engagement and Progression

Attainment and Transition Out.

While the HEPPP encouraged greater participation in higher education of equity groups, particularly students from low SES backgrounds, there is concern that it has resulted in a devaluation of vocational education and training (VET), including alternative pathways to university through VET (Vernon & Drane, 2020).

Equity in tertiary education is on the agenda again in 2021, with an expert panel recently formed to devise a five-year strategy to drive aspiration, improve access and completion and improve the transition to employment (DESE, 2021). As the longer-term impacts of COVID-19 on young people begin to reveal themselves, the recommendations of this panel will be crucial to the future development of equity measures.

Careers and Transitions

Young people in Australia make many transitions between school, further education, and work. Over a third of young people change pathways between what they indicated at 17 and upon leaving school (Ranasinghe et al., 2019). The world of work is complex, and young people take various pathways to find their destination (FYA, 2018).

Most young people make many transitions in and out of education and work, with young people from low SES backgrounds making even more transitions than other young people (Ranasinghe et al., 2019). Many vulnerable young people are likely to transition between school, training, and work up to fifteen times (Ranasinghe et al., 2019).

One reason for this is the mismatch between what young people want to do and the pathway they plan to take. For example:

- nearly half of all students who are aspiring to a role requiring a certificate undertake a bachelor qualification (Joyce, 2019)
- a third of students aspiring to a role requiring a bachelor qualification undertake a vocational qualification (Joyce, 2019)
- over one-in-four disadvantaged students wanting to enter a high-skill occupation in Australia do not plan on completing tertiary education (OECD, 2019).

What helps students find pathways to higher education?

Students often enter senior secondary school with a limited, confused, or incomplete understanding of their careers and ambitions and the pathways available to them (OECD, 2021). While this is perhaps not surprising, it is essential that young people develop an understanding of the many pathways following school to help build and sustain their engagement and ambition throughout their time at school. In light of the multiple career changes likely to face young people, an increased capacity to understand and navigate different pathways throughout their lives and a greater career management capability is required.

A range of options support young people with their choices about pathways, including advice from parents and friends, access to online information, peer influences, and availability of career education in school (Polvere & Lim, 2015).

Research confirms that young people utilise “hot knowledge” to make career decisions (Smith 2011). “Cold knowledge” is classified as formal or official sources of information, such as government guides, university brochures, and websites. Hot knowledge, by contrast, can best be described as “word-of-mouth” knowledge gained from social contacts such as family, friends, teachers, and others (Smith, 2011). A more limited body of research references information gained personally from previously unknown contacts, such as advisors on open days, known as warm knowledge (Slack, Mangan, Hughes & Davies, 2014).

First-in-family students and students from low SES backgrounds are likely to rely on teachers for hot knowledge through formal classroom discussions and informal conversations; however, the influence of teachers is secondary to parents or peers (Gore et al., 2015). Parents and families remain influential and critical sources of advice in young people’s career aspirations and decisions. Young people trust their family and parents over any other source of information (CICA, 2017). Dockery et al. (2021) found that nearly all Year 11 students have talked to parents and friends about careers, while around three quarters have spoken to career advisors.

While a young person’s family is often the primary source of advice and influence on their career plans, they are not always aware of the diverse career options available or higher education pathways more generally (OECD, 2019). The information young people receive from parents and families is likely to be influenced by their cultural capital and the shared

knowledge of their community and more likely to be piecemeal rather than comprehensive (Polvere & Lim, 2015). Furthermore, parents are more inclined to understand and support university pathways over apprenticeships or vocational training in Australia. Wyman and colleagues (2017) found that a third of parents believed that university was the best career option for their child, while less than a tenth nominated vocational education or an apprenticeship or traineeship as being their child's best option (Wyman et al., 2017). However, this belief system varies by SES. Vernon and Drane (2020) found that more parents from low SES backgrounds discuss vocational education options with their children while parents from high SES backgrounds favour university pathways. These discussions influence students' destinations.

Career Education and Workplace Engagement

School-based career education plays a significant role in supporting aspiration and providing information. Career education broadens young people's understanding of roles and industries, builds work readiness and capabilities, and opens varied pathway options. Recent OECD (2021) longitudinal analysis confirms that young people benefit from exposure to a range of different careers, experience in finding out about pathways and industries, and an understanding of their skills and motivations. Young people with skills in exploring and experiencing the world of work are more likely to have career certainty and transition into employment.

There are, unfortunately, a few challenges in the system of career education provision for young people in Australia, including the timing, amount, and scope of career education. These are discussed in turn below.

Timing

Timing of career advice is critical. The Skillsroad Youth Census (Buckley, 2018) highlights that around a quarter of young people start thinking about their career in Year 8 or earlier. Nearly 40 per cent of young people who wanted to take an apprenticeship decided this in Year 10 or before (Buckley, 2018). This points to the need for career development to begin early, ideally in primary school, and continue high school. However, Galliot and Graham (2015) found that over 60 per cent of the Australian students in Year 9 reported not having career advice when making subject selection.

Career exposure and workplace engagement can also support young people to engage or re-engage in school, with a recent project on workplace learning in New South Wales finding that close to a third of young people re-engaged in school following workplace learning experiences conducted in Year 10 or 11 (O'Connell & Southwell, 2021).

Quality and variety of information

Young people benefit from information on the labour market, future job projections, training pathways, and training providers to broaden their ambitions and develop an awareness of what it takes to achieve their aspirations and enable progression towards career goals. Further, skills in career navigation, such as recognising transferable skills and experience and applying for roles, are vital given the numerous career changes young people are likely to make.

However, while a great deal of information is available online from Australian government agencies, educational organisations, and third parties, it varies in quality and accuracy. Online information is plentiful but often incomplete, fragmented across different websites, and challenging to navigate. There are numerous federal, state and territory, and organisational/affiliated websites to help young people explore post-school options. Additionally, students may need to navigate between information provided by multiple service providers and organisations. The Productivity Commission (2016, p.116) described online careers information in Australia as carrying "the risk of a confusing maze of information."

Polvere and Lim (2015) found that it fails to meet the needs of young people, who prefer career-related information to be supplemented with face-to-face support, mentoring, and personal advice.

Career education in schools has a crucial role, but there are significant limitations on access to careers teachers and the quality of information provided. For example, a recent study showed that one in five students wanted more information about all available options. A similar number felt they had been pushed/ encouraged to pursue university. Only half of the surveyed young people thought they had received good quality career information from their schools (Buckley, 2018 in Austin et al., 2020).

Career practitioners are often appointed part-time and have limited time devoted to career guidance (CICA, 2017; Austin et al., 2020). A range of Victorian research reveals that schools spend a small amount of time per student, from 45 minutes or less to a median of two hours. In light of limited dedicated funding for career advisors, many schools focus career education efforts on senior secondary levels (Dandolo Partners, 2017; Economic, Education, Jobs and Skills Committee, 2018).

Pathways knowledge

Maintaining current career and pathways knowledge among career advisors is also an ongoing challenge. School-based career advisors can be stretched for time and limited to focusing on student subject selection rather than the future labour market or encouraging students to take a broader career outlook that prepares them for life beyond school (Dandolo, 2017)

School-based career advisors have also been found to prioritise university pathways over apprenticeships and vocational training (Education Council, 2020). Career advisors in schools often have more knowledge of university selection procedures than apprenticeship requirements, presenting university as the default option and not actively promoting VET pathways. Preconceptions and a lack of knowledge about the “types” of people who choose VET pathways can limit advisors’ ability to inform students about a range of career options (Education Council, 2020). Informal advice is also likely to come from classroom teachers. However, many have limited or dated career education knowledge, especially on non-university or blended pathways (CICA, 2017).

Over time there has been a decline in the proportion of students accessing information from various sources, including a significant decline in the number of young people attending TAFE information sessions (Dockery et al., 2021). There is a need to ensure that a breadth of career information is available to young people and that the advice is made available on a wide range of pathways. Career advice is needed earlier and in a more integrated approach linking lessons and the curriculum (Groves et al., 2021). Like literacy and numeracy, career education should be integrated across the curriculum.

Even though a wide range of pathways exists, not all young people have the capacity to access them. Young people, particularly those from low SES backgrounds, need a range of supports to identify and build aspirations and understand and navigate pathways and institutions.

Pathway Programs

University pathway programs include a range of alternative (non-traditional or non-ATAR) paths. While there are many pathways, finding out about them, who they are open to, the cost, and how and when to access them can be confusing. There is no clear information on the typologies of alternative pathways or university pathway programs and no single resource showing the range of options to gain entry to different courses or education providers. This challenge highlights the barriers young people may face when seeking higher education through other entry mechanisms. It also poses a key barrier to schools seeking to

advise young people, with entry requirements differing between courses, institutions and target cohorts, including the additional burden on schools, for example, via school recommendations for course entry.

Aside from the traditional pathways to university that include ATAR requirements or a VET pathway, university pathway programs create alternative channels for students to access higher education.

What do alternative pathway programs to university offer?

University pathway programs are designed to support student retention, success rates and diversity of skill development. They aim to increase student participation rates through five lenses:

- Awareness – understanding of available opportunities and how to access them.
- Aspiration – the desire to pursue higher education.
- Affordability – financial accessibility to student life.
- Achievement – the academic requirements to gain entry to university.
- Access – admissions policies that open doors for students (Agosti & Bernat, 2016).

These programs are not designed explicitly to support students of equity groups; instead, these programs aim to make university accessible to all. However, programs often lack transparency and the information necessary to support student take-up and mobility (Pitman et al., 2016). This points to a key challenge. How can providers of alternative pathways make these accessible to young people who face challenges locating information and navigating entry systems?

How do alternative entry programs to university support young people?

Australian initiatives designed to address the underrepresentation of equity groups typically focus on two forms of action. Educational preparedness is a key action, with a strong focus on addressing the gap in academic achievement between students from low and high SES backgrounds as crucial to encouraging greater diversity in higher education participation (Gore et al., 2015).

Next, “enabling programs” are designed to provide alternative pathways to higher education, particularly for students who may not be eligible under the primary admission criteria (Pitman et al., 2016). Pathways programs became a focus for institutions when demand-driven funding increased the diversity of students entering the system and the number of students with lower levels of academic achievement (Pitman et al., 2016).

Findings from a 2011 analysis of the Australian Higher Education system showed that although alternative pathways or “enabling programs” do not target specific groups, 50 per cent of participating students identified as Indigenous, from regional and remote backgrounds and low SES backgrounds, an increase from the 30 per cent of the domestic undergraduate population (Lomax-Smith, Watson & Webster, 2011).

In a more localised study run by La Trobe in 2014, it was found that students participating in enabling programs were more likely than their undergraduate counterparts to be mature-age and first in their family to seek higher education. Additionally, participants were more likely to be from English as a second or additional language, refugee or Indigenous backgrounds, compared to the broader population (Andrewartha & Harvey, 2014). Another similar study of enabling programs at the University of Newcastle, the University of Southern Queensland and the University of South Australia found that between 20 and 30 per cent of participating students themselves and more than 25 per cent of their parents did not complete secondary education (Hodges et al., 2013).

When asked how they learned of enabling programs, participants reported finding information from targeted guides, both online and physical, and advice from trusted people.

Direct marketing and word-of-mouth promotion were reported as most effective, including targeted and social media rather than traditional media advertising (Agosti & Bernat, 2016). Students choose pathways to get into their desired course when they could not attain entry through the mainstream route.

There is a wide range of alternative pathways into higher education, including enabling programs and alternative entry schemes, but there is no clear source of information for these. Limited research exists on how young people find out about non-ATAR pathways to university, including through vocational education and training and enabling programs, and if this varies by equity group. This project seeks to provide further insight into how students know what they know about careers and pathways.

Methods

This project uses a mixed methods approach, incorporating quantitative and qualitative data. The main benefit of this approach is that it helps to report findings from quantitative data sources that may be explained by qualitative rationale. A mixed-methods approach allows for higher validity and reliability of data, as data from different sources can be triangulated for more holistic discussion (DeCuir-Gunby & Schutz, (2017).

A quantitative survey was conducted of senior-secondary students distributed through two networks – through the Urban School at RMIT (a senior secondary provider within a TAFE) and Learning Creates Australia (a social enterprise with significant youth leadership) network of young ambassadors. These networks were chosen to minimise the burden on schools that were continuing to be impacted by COVID-19 and limiting students' participation in research during class time.

The quantitative survey received 58 completed responses from senior-secondary students. The response rate was limited as schools cycled in and out of lockdown. This limited response rate restricted the capacity to analyse the data according to key equity groups.

The survey asked a range of questions about young people's aspirations, including whether they had identified a career, their post-school plans and how they found out about pathways, including alternative pathways such as undertaking an enabling program or vocational education and training to secure university entry. A range of demographic data was requested, including postcode, language background other than English, Aboriginal or Torres Strait Islander identification, disability identification, mental or physical health condition and mother's level of education to understand which equity group/s students belonged to. However, small survey results meant that it is not possible to make generalisable statements about students in different equity groups.

School student responses were mainly received from one school in South Australia and Urban School at RMIT (which completed a truncated survey).

Over half (58%) of the respondents studied in South Australia, 36 per cent in Victoria, three per cent in New South Wales, and another three per cent in Tasmania. Over two thirds (70%) of the respondents identified themselves as females, and 30 per cent as males. Most students are in Year 12 (43%) or Year 11 (21%), with the remainder (36%) in Year 10.

A significant minority (22%) of the students reported that they had a disability or health problem that has lasted for six months or more and limits the amount and type of work or study they can do. This is a greater proportion than represented in the population, potentially due to the timing during COVID impacting on young people's mental health.

Just over half the young people surveyed indicated their mother had completed a bachelor degree or above (51%). A significant proportion (15%) of the students speak a language other than English at home. Most students identified themselves as above average academic performers, with nine per cent indicating they are in the top one per cent of their classroom and over three quarters in the top 30 per cent of their classroom.

A second survey was conducted with university students in their first or second year of courses, where many students entered via an alternative pathway. This survey aimed to see whether there were statistical differences between students who entered via an alternative pathway and other students in the same course. We received 92 responses. The results of this second survey did not reveal any such significant differences perhaps because students were drawn from only two faculties and greater variance may be found in a larger sample. It has not been included in this analysis.

Focus Groups

Four focus groups were conducted in late September 2021 to explore the themes emerging from the survey results and how young people learn about pathways into education.

Learning Creates Australia reached out to schools in their network to bring together groups of young people from various equity backgrounds. Students in the focus groups came from three different schools: a low SES comprehensive boys' school with a gifted education program; a high SES comprehensive school; and a flexible learning school (a school that provides wrap-around support to re-engage young people in education).

Fourteen students in Years 11 or 12 participated in one of four discussion groups across three states, Western Australia, New South Wales and Victoria.

Demographics for the focus group participants were supplied by the teachers facilitating their participation but were not discussed as part of the focus group conversations. Given this, comments are not generally attributed to students from a particular equity group.

The demographics of the students in the focus groups were as follows, noting that many students fall in more than one equity category; hence the aggregate exceeds the number of students.

Table 1. Focus group demographics

Characteristics	Number of students
Low SES background	5
Disability (mental health)	4
State Care	1
Refugee background	4
Language other than English	3
Disability – other	2
Aboriginal or Torres Strait Islander	2
Female	5
Male	9

Focus groups were held on Zoom and consisted of a small group discussion facilitated by the researchers. Discussions were recorded with the permission of the students to enable transcription. Transcripts were analysed to ascertain key themes discussed between researchers to validate findings.

In three out of four focus groups, students kept their cameras on – whilst in one, they were off by student choice. Three out of four sessions were attended by a teacher from the school, who primarily played the role of a supportive bystander and occasionally provided helpful clarification on school structures and programs.

Focus group discussions centred on asking the young people about their future career, if known, and how they had identified this. On some occasions, they were unable in the first instance to identify a career and instead were prompted to identify skills they thought they might use. In all but one example, young people were able to identify what they liked and were good at.

The young people in the focus groups were also asked what path they thought they would take and who they had talked to about this. This was followed by a discussion of other paths if their initial plan failed to be realised.

Finally, the young people were asked what would work better to help them think about careers and pathways and find their way to further education post-school.

Throughout the focus groups, the young people were engaged and willing to contribute. By the conclusion of each 40-minute discussion, they contributed many ideas that would support them in making more informed decisions and feeling more confident in their future transitions. There was considerable alignment in the issues, and suggestions, provided by these young people.

Findings

This section summarises the findings from the survey and focus groups. It draws on the survey results and includes comments and quotes from the focus groups to complement and provide insights to support understanding of the survey results.

Career Aspiration

The survey results show that over half of all young people surveyed (n=58) had an idea of the career they wished to pursue, one in four were unsure, and one in six did not have any idea about the career they wanted to pursue. Given the vital link between aspiration and successfully transitioning to a post-school pathway, all young people would benefit from support to discover what careers interest them.

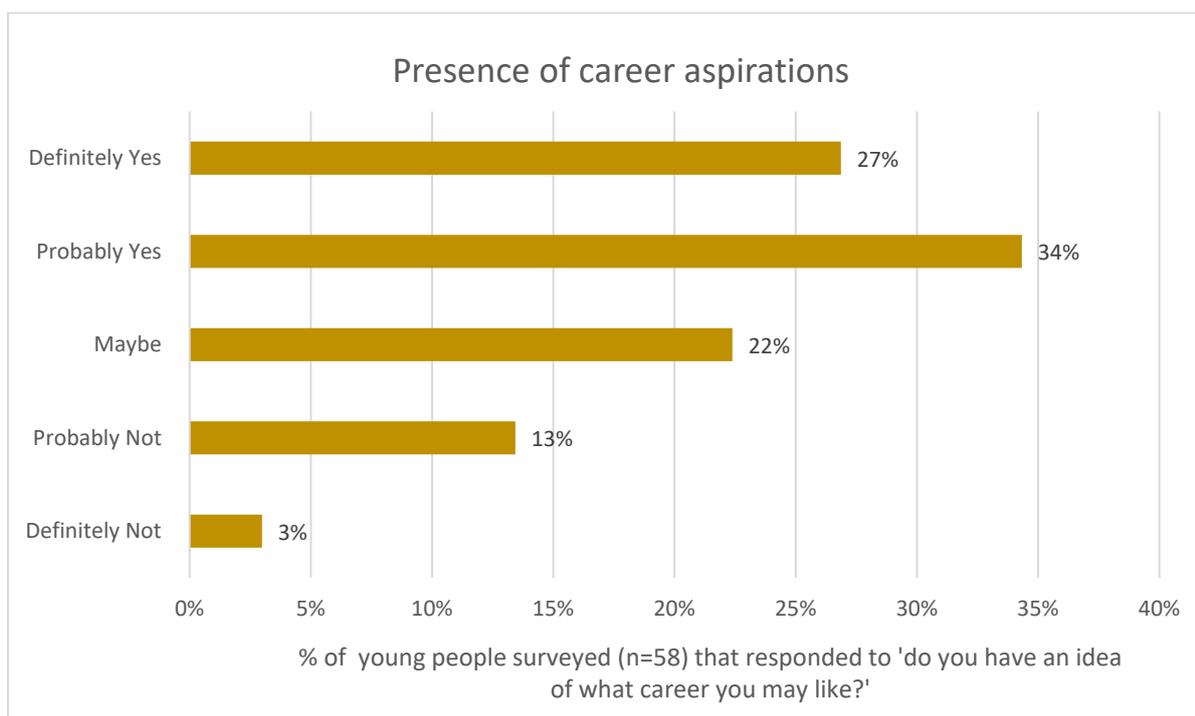


Figure 1. Career aspirations

Focus group discussions revealed that most participants had an idea of what career they may like:

“I’m interested in starting my own business, going into franchising and stuff.”

“My main career is policing; my backup would be something like PE teaching or physiotherapy. With policing, it’s something that has always been in the back of my mind; I fell in love with it as a kid.”

Some of these young people provided detailed explanations on what drew them to this career, including family influences and discussions with people in these careers. Others possessed a more limited understanding of their motivations and perhaps the jobs they were aspiring to.

Some of the young people needed prompting to think about what they liked and could pursue, but were then able to articulate their ambitions:

“I’m not sure; I like cooking and baking. I’ve spoken to my nan, who is a chef and was an apprentice. I’ve done a work placement in a restaurant.”

Many of these young people lacked the confidence to express what they might want to pursue. Discussions with a career advisor suggested this might be due to a heightened fear of failure amongst students who had a disrupted upbringing. Some students were reluctant to name or commit to a pathway if it did not eventuate. This aligns with Programme for International Student Assessment (PISA) data around the heightened fear of failure, particularly for girls from low SES backgrounds (OECD, 2019).

Other young people nominated a career but did not articulate how this draws on their skills and interests:

“I want to go to uni and study architecture – it is important to my parents who want their kids to become doctors or architects or something.”

“What I enjoy is a PE teacher or something like that, or an engineer.”

While these young people have a destination in mind, they struggled to link it to their skills and interests and were less likely to have researched the career or discussed it with a wide range of influencers.

One young person from a low SES background could not identify a potential career:

“I have no idea – there aren’t many subjects I don’t like. I think I’ll do uni, but I have no idea how I narrow down options. I never see myself from the outside, so I don’t think about what I’m good at. I enjoy writing. I think I’ll go to uni.”

The young person expressed the expectation that he would attend university as he was streamed to an academic program. Despite, or perhaps because of, his high academic ability, the young person had not had the opportunity to explore different pathways or hear from a range of people in different careers. He reflected that career education seemed less critical for academic students in his school than focusing on an ATAR, which the school had repeatedly mentioned as the fundamental goal for the academically streamed young people.

This young person’s experience as a highly capable student in an academic stream sharply contrasted that of his peer, a young person with a disability in a VET stream who had been able to try a variety of pathways. His peer had talked to family members, and key supports to decide on a career pathway and felt relaxed and assured about his future.

Overall, young people in our study could generally name what career they would like. Many provided insights into when they first thought of their preferred career and discussions with parents and people in the industry.

Perceived level of tertiary education required

Most survey respondents indicated that their career would require a university degree or higher, but 17 per cent were unsure. A few others (4%) reported they would need VET/TAFE or some form of on-the-job training/apprenticeship, and two said they needed no further training.

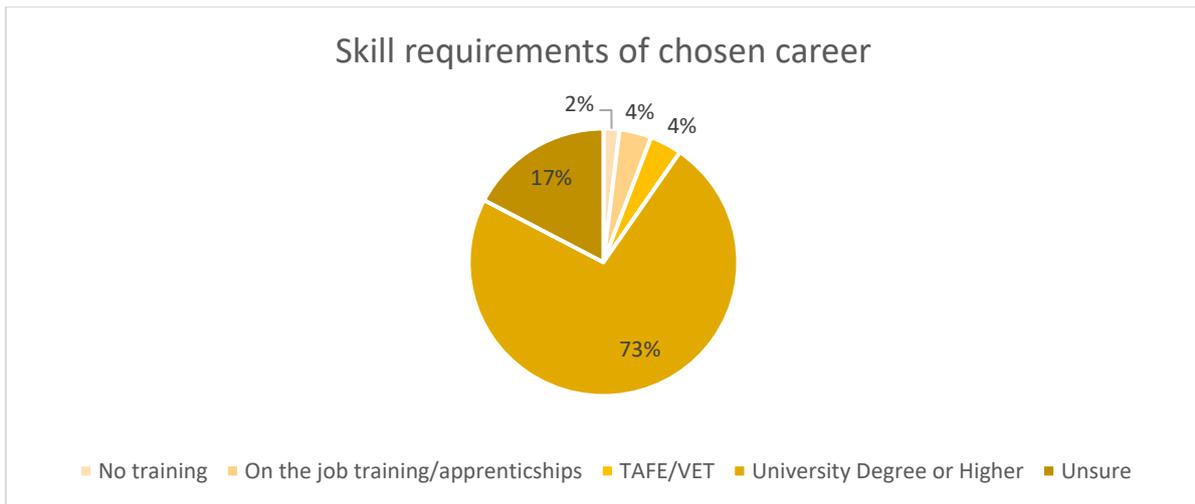


Figure 2. Skill requirements of career

Pathway intentions

More young people surveyed intended to go to university than those that thought their career would require it, with 83 per cent of those surveyed planning to go to university even though only 73 per cent of young people thought they needed university for their career.

A link between career aspiration and intention to go to university was not evident, nor was a link between likely career skill level and university intention, although sample sizes were small. While a clear majority were aspiring to university, survey respondents from a non-English speaking background were slightly less likely to aspire to university.

The survey results show that most respondents (90%) intended to get an ATAR, with only a small number not sure or not planning to get an ATAR. Young people’s intention to get an ATAR exceeded the number of young people intending to go to university. This aligns with existing research that indicates that achieving an ATAR is seen as the success measure from the education system (O’Connell et al., 2019).

Very few young people (17%) reported their intention to pursue VET/TAFE pathways. Forty-four per cent of young people strongly disagreed or disagreed that they intended to apply to VET/TAFE. In contrast, 39 per cent remained neutral, neither agreeing nor disagreeing that they intended to pursue VET pathways.

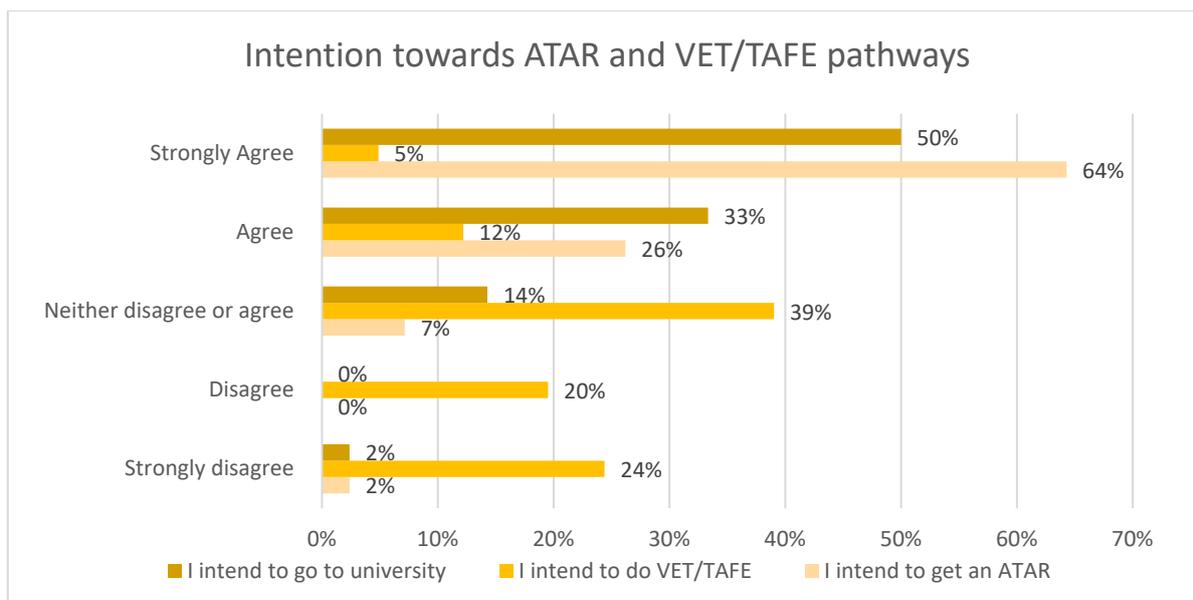


Figure 3. Young people’s intentions regarding university and VET/TAFE

Focus group respondents were much more likely than survey respondents to indicate they would engage in vocational education and training. Six of the fourteen young people identified a vocational certificate and/or apprenticeship as necessary for their career.

This difference is in part due to differences in the cohorts. Focus groups included young people enrolled in the Victorian Certificate of Applied Learning as well as students in vocational streams at a school in Western Australia. These young people were in courses focused on transitioning to vocational education or employment. Many of these young people had aspects of training and work experience built into their learning.

Further, all focus group young people were from equity groups, with some engaged in “second chance” learning and receiving more dedicated pathways support. This may reflect why career intentions, skill levels and destinations are more closely linked for these young people and matched to labour market needs. It also reflects the general trend of lower university enrolments by young people from equity groups.

Forty per cent of the focus group participants identified a TAFE pathway, and this was closely linked to their career choice:

“Next year, there is a certificate at TAFE; not sure how it works, but you can go work where you want to. I like mechanics and electrician, I prefer mechanics, but I don’t think there’s a course way to do mechanics.”

“I want to be a sparky – I wasn’t interested in maths, I wanted to do trades. There is this TAFE course that provides entry into the trade. I wanted to prove people wrong about having a disability. I am looking for an apprenticeship, looking forward to working in the mining industry, developing new friends.”

“I want to be doing childcare; I like creative things...I don’t know if I will stay in it. There’s been talk of an apprenticeship at the school. Otherwise, I need to get my cert II or III.”

Interestingly all the young people intending to go to vocational education viewed it as a pathway to a nominated career. The courses and institutions post-school were not the focus. Instead, they focused on their career goals and saw vocational education as the means to achieve this.

This sharply contrasts with the young people aspiring to university, many of whom saw university as a goal in their own right. Sixty per cent of the participants indicated they would go to university. Their decision to go to university is usually linked to a career, but university was often recognised as a desirable destination as well as or rather than the pathway to achieving an end goal:

“I want to do Aerospace engineering... high-tech stuff, so I aim for uni after I graduate from school. A good way to success is to go to university”

“I want to be an entrepreneur but want to go to uni.”

“Once you finish school, your number one priority is uni, you want to go there, so if I’m there, that’s good, but otherwise, there are pathways.”

“I want to go to uni; if not, then TAFE and then uni.”

For young people deciding on a university pathway, this is seen as the default to achieve a promising future. This sentiment was powerful with students from refugee backgrounds.

These responses confirm how stratification can create or verify cultures and place limits or set standards around careers and pathways. Many of the young people aspiring to VET did not mention university as they were challenged to remain engaged in school – completing school was seen as a goal, and university entry was seen as a bridge too far, with these young people not mentioning it as a possibility. Some made an informed choice to undertake VET aligned with their desire to work with their hands and to enter a trade or occupation. Others did not have VET on their radar as their school and family supported a view of success centred on university. This highlights the need for comprehensive career education from early on for all students to ensure that a wide range of pathways are understood.

How young people find out about careers and pathways

Survey respondents relied most on parents and family for information to guide their career choices. Over half of all young people responding to the survey indicated that parents, siblings or family members most helped guide their career choices (see Fig. 4). They were likely to rank family as second most helpful, followed by peers as third most helpful, reinforcing the vital role of a student’s immediate network in helping them learn about careers.

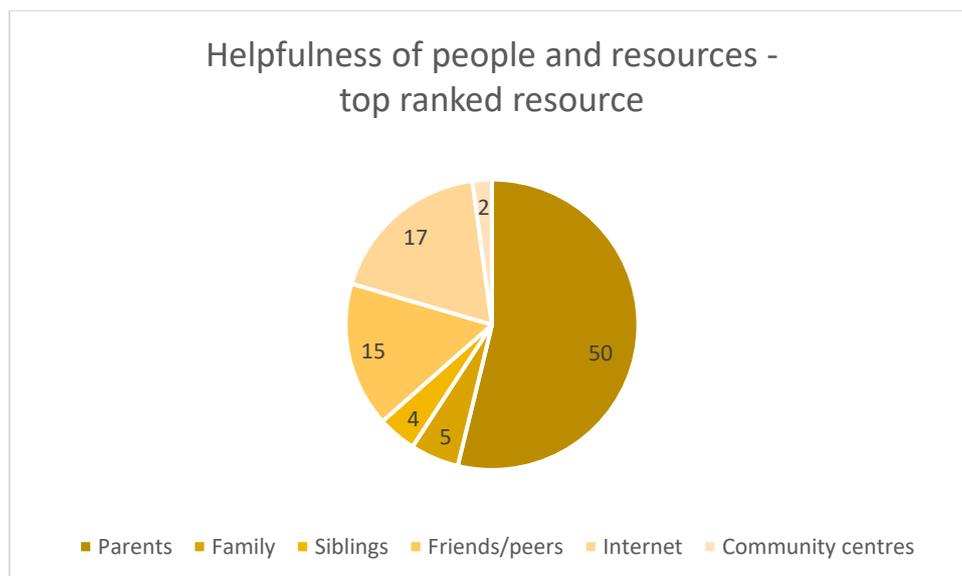


Figure 4. Young people’s ranking of helpfulness of people and resources - % highest rank

Outside of these influencers, media, teachers, and career coordinators played a strong role. Open days were either highly effective or ineffective. The focus groups provided a greater understanding of this. They revealed that open days are highly effective if young people can personally access information from current students but are ineffective if they relay information en masse. The graph below shows the media and teachers as equal highest-ranking influencers. Interestingly, and not shown below, young people were most likely to select career coordinators and teachers as equal second most important influencers.

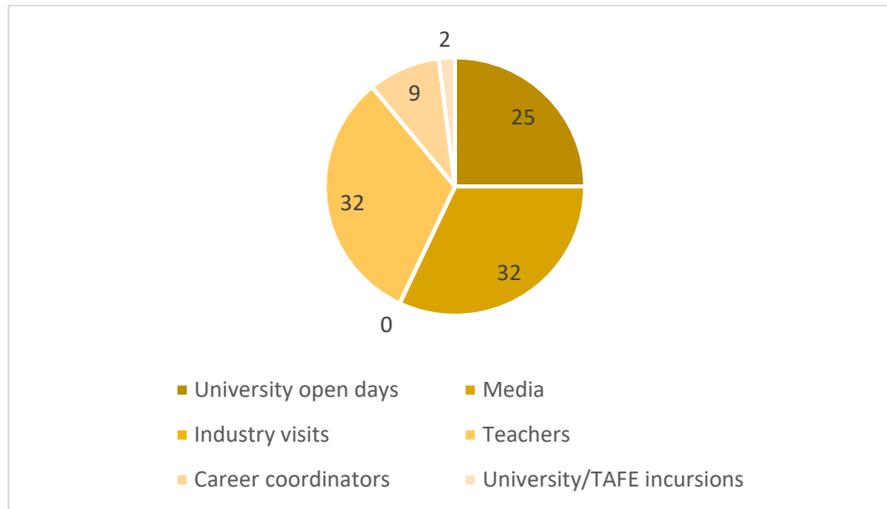


Figure 5. Young people’s ranking of industry and education influencers - % highest rank

Young people in the focus groups reaffirmed the role of parents and family in guiding them and, in some cases, actively steering their direction. Most had spoken to someone in their family as their first source of advice.

“My older sister has helped me; she’s a qualified nurse; she thought I’d be good at youth work or counselling.”

“The only thing I know about how ATAR works has come from different conversations with adults in my life and not from the school.”

Young people who mentioned in an offhand way they had spoken to their parents or indicated only brief discussions were less likely to be sure of their career intentions.

Parents played a powerful influence for young people from non-English speaking and refugee backgrounds who spoke of being expected to have a prestigious career:

“My dad, I come from an Arab background, (they) like their children to be doctors, architects – do your best, go to uni, try new things. I got two mates that are architects; they told me you need to work hard. I haven’t thought what I would do if I don’t get it; I’d talk to my dad.”

“Families are important; their advice is very important to you; they know what is good and bad for you.”

Young people from non-English speaking and refugee backgrounds generally responded positively about TAFE as a study option. Still, they indicated it is a destination for other people or a secondary or backup option.

Many young people in our focus groups chose a career that others in their family had undertaken and spoke proudly about wanting to be like others in their family:

“So what happened is my dad wanted to be a pilot, and he didn’t pass the requirements and didn’t become a pilot, my grandpa was willing to be a pilot, but

just before he got an eye check and found out there was something so he can't become a pilot, my family supports me to become an aerospace engineer."

"I talked to my stepdad because he used to be a mechanic, and I want to grow up to be like him."

"I talked to my nan who is a chef ..."

Further research is needed to understand whether young people aspiring to family careers are limiting their choices and aspirations or whether it is reflective of shared interests with family members. Broader career exploration could potentially enable young people to understand other aligned or potentially divergent career choices.

The role of hot knowledge as featured in the literature was reaffirmed:

"I'm interested in starting my own business, going into franchising and stuff. I thought a business degree would help with this. Then I thought corporate law could help; I've done some research about this. I've talked to 3 people with the same degree; a few workmates at KFC have talked to me about their degrees in corporate law – they provided really informative stuff."

"I've spoken to quite a few people about this, careers advisor, policeman and a former policeman; they've been helping me with uni and pushed my passion forward."

The young people who could talk to others in their chosen profession were likely to understand their chosen career better and expressed a deal of passion in their identified pathway. They were more likely to speak about a range of pathways into their career.

Some young people were provided with tailored help to identify pathways – such as Try-a-Trade and work placements. These experiences were often limited to disengaged young people or young people in a dedicated vocational stream. Often these experiences were supported by a significant other:

"My interpreter has experience doing trades, so I look up to him. He makes me do work; he pushes me in the right direction; he is a guidance counsellor for me basically."

"I tried a few trades; now I'm going to get a certificate II then get an apprenticeship. I'm excited about my future – I can't wait to earn money!"

"When I chose to work in aged care, and I got the opportunity, I found out it was the facility my grandfather was in, and I lost him to a stroke; I grew up with him. The fact I lost him, and he wanted me to become a nurse, drives me."

Young people in an academic or mainstream class were less likely to engage in workplace experiences unless they actively sought work experience. This may reinforce why young people in vocational streams often spoke eagerly about a career, whilst other young people spoke about university as they had greater exposure to an institution than a workplace or career.

Career advisors played an important source of advice, streaming information to young people and encouraging students to apply for courses:

"Our teacher is always telling us about pathways into teaching, law and business."

"The careers teacher makes sure we apply for courses, always emailing us and making sure we finish applications."

“Our careers person sends us emails on pathways to different courses... You have to do uni, but I want to work at the same time.”

“When at school, she tried to put together workshops for students – for those who were sure, and for the ones who weren’t sure.”

The focus groups confirmed how young people rely on others in their network to help them identify and pursue pathways and the potential narrowness of options for young people in more limited circles. Career educators convey information to young people but are a secondary source of guidance, enhancing knowledge and encouraging young people to follow through with applications.

Focus groups confirmed how some young people are actively supported to find vocational pathways to facilitate early school leaving or as part of a vocational school pathway. Young people on vocational pathways are often provided with primary advice from a VET coordinator. Further discussions in focus groups, to be reported later, elucidate what changes would better support young people to understand a breadth of options.

Knowledge of alternative pathways

The research sought to understand how young people find out about alternative pathways to university. In doing so, we also explored how young people find out about pathways broadly, including to vocational education and training in its own right.

Half of the survey respondents were aware of non-ATAR and VET/TAFE programs leading to university entry. In contrast, half were either unsure or didn’t know about alternative pathways for university entry. Even fewer (around 1 in 4) knew preparatory courses and other special entry schemes to enter university. One in six knew about special entry schemes. Only 16 per cent of respondents agreed that information was available on possible VET/TAFE programs to university pathways.

Young people in focus groups were somewhat aware of pathways existing between TAFE and university, although this was generally a passing awareness and driven by their research or incidental discussions:

“My second preference is a business degree which I’d love to do, or go to TAFE and then to uni. I tend to do my own research, but I also find out a lot from my school – I always want a safe plan, I have to have multiple backups.”

“There’s a lot of...they haven’t told us specifically, but lots of people talk about the fact there are so many back doors, you can do something related... Various teachers, you end up in conversations about how they did teaching and talk about different ways.”

Although these young people could not always name the different pathways, they expressed confidence in finding alternative routes if their primary path did not work out, including referencing others who could help them find a way through. They said a variety of skills in career navigation that would assist them in finding a pathway and, more broadly, navigating through their careers. One young person spoke about her VET pathway:

“Because I am not doing ATAR and doing Cert III in Assistant in nursing and I go to an aged care facility and get paid and will have that for two years. I will do Cert IV next year, and that will get me a 70 ATAR, and I can go to university, and I have experience and Cert III and IV, and it actually cuts university time to half.”

This young person explicitly sought information on what non-ATAR pathways were available, having seen her siblings complete their ATAR and fail to thrive in their post-school transition:

“I kind of just asked, and I don’t really have time and effort to put time to put in effort into ATAR and both my brothers went through 98 ATAR scores and they are not doing much and I was looking for alternative ways and can work also. I just asked around what is possible and the course I am doing....”

This young person had a developed sense of her career, which supported her quest to find a pathway that met her needs. She then acted as an enabler for her friend to pursue an alternative pathway. This illustrates how warm knowledge of different paths supports young people to learn about and have the confidence to embrace less mainstream options:

“My best friend didn’t know about the pathway, she’s doing it next year and doing Cert IV in nursing, but parents force people to do 6 ATARS. Once you talk to the VET teachers, they can plan this.”

The young person also raised a critical consideration that arose from both the literature and in focus groups – the dominance of the ATAR system as *the* measure of success known by families. This is despite the growth in different models of Year 12 completion, such as unscored VCE in Victoria. Knowledge of alternative pathways may be held by only a select group of teachers, such as VET coordinators, and this is only shared with academic students by exception. Her friend shared the experience of this young person – different pathways to university were only made apparent if a student explicitly asked about them rather than raised as part of a suite of pathways options.

Effectiveness of information

The survey results showed that less than half of young people surveyed stated that the information on school to university transition was effective or extremely effective. An equal number (40%) reported, “neither effective nor ineffective” and 17 per cent reported that the information available was ineffective.

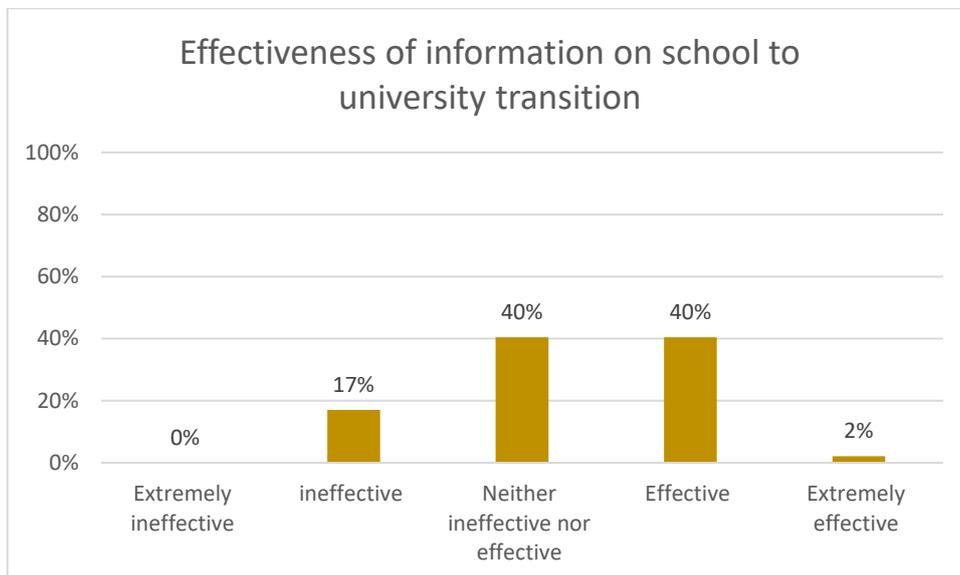


Figure 6. Effectiveness of information on school to university transition

Young people surveyed sought further information on admissions criteria, tuition and non-tuition cost, job prospects, and length of study to help them decide about what they want to do after university. Specifically, 3 out of 4 respondents reported that knowing about the possible job prospects after further study will be helpful in decision making. This links with earlier findings around young people seeing university as a destination and needing support to locate a career post-study.

Young people in the focus groups were not explicitly asked about the effectiveness of information as this could be derived from some young people's answers. Young people who had received information from various sources, such as parents, friends, universities and career advisors, were more assured of their primary pathway and often cited backup paths. Access to a range of advice appears to support young people to feel confident in their choices.

What we need to do differently

Timing of information

Focus group participants raised a range of suggestions for what could improve their understanding of careers and transitions:

“Start early – at a minimum by Year 9 but ideally talking about careers throughout secondary education.”

A consistent theme throughout this research is the need to start early with information about the range of pathways available:

“We need exposure early on to a wide range of people working; it happens in pre-primary, a parent comes in talking about their job. It could involve career talks with one person from each sector.”

“The induction from primary to high school works, it could be something similar, gradual exposure. Just looking at what a day at uni is like. And even simple information, knowing how the system works.”

These young people sought experiences to familiarise themselves with careers and with TAFE and university. This links to earlier comments about not knowing much about the ATAR. Some of the young people did not know about university entry, including the cost of studying, what universities look like and what studying at university entails. More information is needed, in a manner that 'cuts through' such as attending a day at university, to support students to become familiar and dispel myths. Some students discussed how being matched with university mentors created a sense of ease and familiarity with university.

Some young people sought to access a range of information about careers and pathways, including industry visits and experiential learning:

“Experiential learning from early on – trade kids get to do this, like how they go to TAFE a day and see how it works. Pretty cool if they could customise each class to each kid, make kids lives easier.”

“One of the main things that can be improved is more teachers, more personalised experience; I don't feel like I have a good grasp on what my options post-school are.”

“An elective system that doesn't mean choosing from options but creating them.”

Focus group participants wanted to see and experience workplaces and have a say in shaping their curriculum and career options. The lateness of career advice was highlighted as problematic by young people who may be interested in alternative pathways:

“Give us all options earlier in Year 9 or earlier. In Year 11, it is too late.”

“Be good to get help earlier; I didn't get help till Year 10.”

“If we could start before Year 10 and make things less scary, less young people would drop out.”

“Some people might be scared to look at uni as they don’t have information, having it fed to us much earlier when we’re starting to think about our lives in Year 10, having that information earlier would benefit students.”

“I wished they showed you all the options earlier, so you don’t have to wait three years.”

“It needs to start a lot earlier; we don’t find out till late in Year 11 that we can go to school and TAFE; I feel like it needs to come into play when we are in Year 9 as we figure out what we need to do so we have three years to figure out if we will do ATARs, they don’t talk about it enough.”

Focus group discussions confirmed career education literature findings that starting earlier with workplace learning would support greater engagement, as learning at school would have a real world application. Further, young people could work towards a pathway and have fulsome information to consider the merits of university and TAFE.

Young people striving to attend university also found the timing of information problematic:

“Year 12 is too late, and especially now that entry requirements are now in Year 11 if you are an ATAR student. I wonder if it would be better to know about options earlier and continuing that relationship over Year 10, 11 and 12, this would be super helpful rather than a one-off relationship.”

“I think talk to students earlier - all the information I have received is in Year 12 and some after applications have started.”

Overall there was a consensus that, at minimum, students should receive information on careers and pathways by Year 9 and ideally earlier in schooling to enable greater exploration and engagement.

Involve parents in discussions - and showcase success through VET and alternative pathways to university

Young people in the focus groups raised the need for parents to understand the range of pathways and dispel the notion of VET and alternative pathways to university as second or inferior choices.

“Make non-ATAR alternatives visible from early on – first-in-family students don’t know about this.”

“Not having non ATAR pathway as something that you settle for.”

“It’s only by talking to psychologists I have learned about alternatives to ATAR. I wish school was more about learning, opening your mind, not just memorising for ATAR. It creates a lot of pressure”

“Parents should be advised by teachers to provide information, parents know what is the best way for success...your parents’ advice to you is important.”

“Lots of parents don’t know about it – my dad said, “when I was in school, you either attended school or got a job”. Not many parents know about TAFE – we had an assembly, but not many parents went...maybe it should have been a Zoom.”

“My parents don’t know ATAR; I’ve tried to explain.”

This highlights a key challenge. Parents are a vital source of advice and support for young people, but most do not know about other pathways. Any efforts targeted at young people,

for example, through schools, will likely have diminished success unless young people's chief advisors are informed and empowered to support a range of decision making.

A meaningful way to build parents' and young people's knowledge is to showcase success stories from alumni in the school community who have undertaken different pathways and hear from teachers who are viewed with authority and can confirm how students can embrace a range of pathways.

"Have assemblies for parents on careers conversations. Parents should be advised by teachers and they talk from their experience. When teachers advise them then my parents' advice can be different. They can get the big concept from teachers. A lot of parents don't know about it. Not many parents know about TAFE and other alternative paths. I think we had an assembly and there are many parents who missed it."

"It would be actually very powerful for students to come back as alumni and to talk about their journey for parents to hear about. That would be powerful for parents that 'my kid will be ok'. Often parents had fears and they project that to children. I would love to hear from someone who has experienced and done it."

"Young people as alumni, students who completed a different pathway, would be valuable. Parents have their own fears and have their own background."

"Kids should come back – it was because I heard from a student from X school that motivated me to come to this high school. Stories from previous students are so much more powerful."

These concrete suggestions from young people could be implemented in schools at low cost and would enhance parents' and young people's understanding of the wide range of pathways that can support young people to achieve success. COVID-19 has transformed how schools interact with parents, with remote learning supporting parents' engagement at work or home. Career educators have engaged families in career discussions remotely, including those who may be reluctant or unable to attend school in person. Virtual mechanisms can support greater engagement from parents in career learning, enabling them to attend remotely and reducing barriers some families face in attending a physical schoolground. It also allows young people and parents to hear from a broader range of influencers.

School teachers' insights to support the focus groups confirmed the need for parental engagement to understand different pathways.

"We don't have TAFE come in; in Year 9 message is ATAR, parents and kids are stressing about ATAR in Year 9. They find it hard to believe there are alternative pathways."

This reflection confirms the need for pathways discussions to be held much earlier than in Years 10 or 11. The range of possible pathways needs to be discussed at the time discussion of ATAR commences, at Year 9 or earlier in some schools, to present a range of options and talk about how schools and parents will support young people to explore the right path for them. If alternative pathways, be it non-ATAR university entry or vocational education, are only introduced when students select Year 11 subjects, this reinforces the perception of different pathways as second-rate options for young people less likely to succeed on the "main" path.

Build access to warm knowledge

Young people consistently requested more personalised information. They talked about universities attending their schools for long, generic information sessions:

“Universities come out and do assemblies, and it is too much information. Some have already made up their minds, and it is just too much information, and they have their own open days.”

“An assembly for one ½ hour, you don’t focus and get disengaged.”

Despite universities investing time in speaking to school students, the volume of information and its presentation did not inform the young people in the focus groups. Better ways to present are suggested below and include the value of warm knowledge and peers delivering information.

Ideas for more practical information provision include universities reaching out to young people that are interested in careers in an industry:

“Maybe a couple of people reaching out to high school for kids who are interested in engineering or nursing and inviting a few kids to go to the university and have a tour.”

This responds to key insights raised during consultations that some young people did not have an awareness of universities. When they were aware of university, the understanding was usually limited to the local university that had reached out to the school.

Young people spoke of the desire for current university students to talk to them and the benefit of university mentors:

“Try to get to students as early as possible, create a personal connection. Having second or third years coming and speaking to Years 9,10,11,12 is far more effective than having a lecturer – having someone fresh out of uni can connect more.”

“A uni mentor, a personal email would be really useful. “

“I have a mentor and can ask questions and get in contact; it is really helpful. Being able to contact a lecturer or a teacher is much easier than using the broader system.”

“Mentor classes instead of a massive assembly where no one pays attention. That would be ideal. When you get closer, unis should reach out for direct entry – that would be ideal.”

“Providing information more oriented to each person and their passion, for example, a person with a medical degree speaking just with students interested in medicine.”

“Students who have very specific questions, could join chat groups or meet other students who could be in their cohort. A bit more personalised rather than handing over a handbook. “

Students conveyed that they were more likely to trust existing university students than lecturers or other university staff. A connection with “real” students would help them learn about university. They wanted to have the option to receive information about different courses but not to have to sit through long sessions.

Discussion

Our research affirms and adds to the existing research base about pathways and transitions. Ideally, based on what our participants said, all young people would finish school with a sense of:

- What they like and are good at
- Careers they might wish to pursue
- Courses and pathways that lead to their chosen destination.

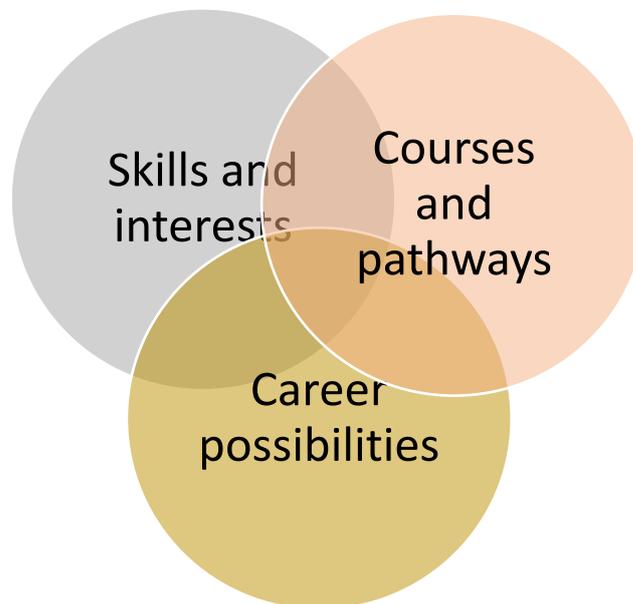


Figure 7. Ideal understanding of careers and transition

Focus group data showed young people with confidence in all three areas are more assured about their future, including understanding alternative pathways to university and vocational education and training, and were equipped with backup plans to lead to their chosen career. Young people with a strong sense of their skills and interests were likely to link these to their chosen profession – often, this career was shared by others in their networks, such as parents or other family members.

This sharing of a chosen career with family members perpetuates a narrowness of occupations and aspirations, with young people from equity groups remaining likely to aspire to a set range of jobs based on their frame of reference (OECD, 2019). Hot knowledge is heavily relied upon, and young people with limited or narrow networks are less likely to have access to a range of career advice from trusted advisors. Further exposure to the world of work, to build up a bank of warm knowledge about different workplaces and industries, may support young people to aspire to a broader range of careers.

In our research, young people with a trusted advisor – be it a sibling, a co-worker, or a parent – were more likely to have a sense of their future pathway. Some young people validated knowledge they held with others, including career advisors, and used it as a springboard to conduct their own research, including reaching out to tertiary institutions. The survey data confirmed how careers advisors played an important secondary role in validating young people’s careers and aspirations and providing information on pursuing this. Young people in the focus groups spoke of careers advisors feeding them information and following them up to ensure they were applying for things. Notably, school staff referred to the prevalence of information on university entry, including through information sessions.

Some young people knew what they were good at and their ultimate career but had a limited understanding of pathways. Despite identifying an aspiration, some young people were challenged about the next steps they would take. For example, having well-developed cooking skills and wanting to be a chef or baker but not clearly understanding what would be involved. Some of these young people lacked the confidence to find further information, despite identifying individuals that could help them. This contrasts with young people who

had engaged in a range of vocational experiences through their school to help them to determine a TAFE pathway and who expressed confidence in their pathway choice. This reaffirms the vital role of workplace learning in schools and the challenge to broaden and scale career development and workplace engagement.

Young people from some equity groups were more likely to receive targeted career support than others. Young people with a disability, and young people disengaged from school, were more likely to receive support to trial a range of vocational pathways to support their future transition, including to help them to leave school early. These young people were often streamed into vocational classes. They had the opportunity to engage in workplace learning to try different careers, although this downside is a narrowing of the pathways for these young people. They gained confidence in their ability to gain work, driven by their workplace experiences, and appeared more comfortable and assured about their futures than young people who lacked a clear sense of their future pathway or career.

Young people in the focus groups were more likely to have identified a career aspiration than those surveyed, and for their career and pathway to align. This is potentially because they are part of an equity group that is supported by a strong career program and university outreach or are in a vocational education stream.

Many young people identified the importance of university – and in some cases, this overshadowed or seemed to drive their chosen career due to a family desire for a student to engage in a prestigious occupation. This was significant in students from a refugee background. These young people were also most likely to talk about a myriad of flexible and alternative pathways and have spoken with others in their network about their desired occupation. They expressed assurance at their capacity to manage any hurdles or roadblocks, perhaps driven by both their preparedness due to additional research and their developed resilience given their personal circumstances.

Our research shows that some young people lack an understanding of what they are good at and see their destination as a university course. They feel the expectation of going to university and see it as a safe path, even if their career destination is unclear. Our research confirms the dominance of the ATAR, with nearly all young people surveyed intending to get an ATAR and most planning to go to university regardless of their career choice. Focus group data confirmed that many young people, particularly those who are higher performing academically, expected to attend university. Their school reinforced this, and at times their parents. These high performing students were unlikely to have received information about vocational education. They also had not received information about alternative pathways into university unless they were in a larger, identified equity group in a school that had a partnership with a university.

At the same time, some young people questioned the ATAR, the pressure and stress they feel and perceptions that it limited their ability to engage in broader learning. They expressed a desire to learn about different pathways so they could focus on building their skills and capabilities in a manner that was less stressful and more engaging.

As we hypothesised, in our study, young people in equity groups in a mainstream setting, such as a first-in-family Indigenous young person in an academic school, do not appear to receive tailored support and at the same time may lack a broad network of advisors to support their transition. This is a context in which young people struggle to identify a future pathway and feel pressure to succeed.

Our hypothesis regarding alternative pathways was partially proven. From our sample, young people who have a significant person (family or friend) with lived experience of pathways, a trusted career advisor or who are targeted by universities due to their status as a low SES school are likely to possess knowledge of different pathways. Young people actively pursuing alternative pathways were most likely to have found out about these

pathways from somebody they knew – for example, a sibling or co-worker- or to have sought knowledge out explicitly based on previous poor experiences with the mainstream system.

Young people felt alternative pathways were seen by schools and parents, if they had knowledge, as an alternative second chance option if needed, rather than a pathway a student would elect to undertake as a preference. One student pursuing an alternative pathway actively sought out the pathway herself, having seen others in her family fail to succeed through the ATAR path. She then spoke to her peer network, and a friend also changed to an alternative pathway.

Whilst alternative pathways existed at one school; they were not publicised. Overall, it appeared that the ATAR stream was the default stream unless a young person disengaged or chose a vocational path.

One reason for this is the lateness of career and pathways advice – the ATAR is spoken about early in secondary education with students working towards this. By contrast, different pathways are not referenced until senior years if they are talked about. They are then seen as second-chance or inferior options to support students who are unlikely to succeed in the mainstream success measure, the ATAR path.

While most young people surveyed were satisfied with the pathways information they received, a small group were not. Young people in focus groups were asked to comment on what could be improved – this elicited a more in-depth response that showed tremendous room for improvement. Nearly all young people identified a need for more information and information earlier in their secondary education. In both surveys and focus groups, only a minority of students were aware of alternative pathways to university. Students were craving information about pathways – both ATAR and non-ATAR, to inform their decision making. They also sought broader information about course costs, how universities and TAFEs work and career pathways.

Part of the reason for this lack of information may be the myriad of alternative pathways – including some requiring lengthy endorsements from schools. With such a range of alternatives, it is far more difficult for schools to advise on alternative pathways than the efficient ATAR entry mechanism. However, schools can speak about the existence of a range of pathways from earlier on, and young people who know what they like, their potential career and with developed skills in career navigation can locate specific pathways to meet their needs.

The research confirms what is readily discussed in career education literature (including by Galliot & Graham 2015; Buckley 2018), the need to start early to ensure all young people can explore workplace experiences, understand the existence of a variety of pathways and make informed choices. If young people better understand their skills and aspirations and know that a range of pathways exist, they would be better placed to explore the paths that lead to their potential careers.

All young people in our study discussed the desire for career information to feature much earlier in the curriculum. They want to learn about different jobs during their early secondary years. They spoke that career exposure occurs in kindergarten - parents are encouraged to speak to enter services and speak to children about their jobs. However, this disappears in school – and talk of careers resurfaces with discussion of Year 10 subject choice or later. Young people expressed that more discussion of pathways and careers earlier in secondary school, by Year 9 at the latest, would help them remain engaged and see the links between school and their future careers. This may be an important part of stemming the growing disengagement from school. There are existing levers for starting early in states such as Victoria. A careers curriculum begins in Year 7, and a range of initiatives have been

introduced in response to the recent parliamentary inquiry. Similarly, initiatives in New South Wales such as the Models of Workplace Engagement have demonstrated how participation in workplace learning before senior years supports engagement.

Recommendation 1) Career education should be prioritised in the curriculum, with resources allocated to mainstream career learning across subjects in addition to supporting dedicated career practitioners.

All young people benefit from a range of workplace engagements, hearing from other young people in industry, trying different skills at school and visiting workplaces. By starting workplace learning sooner, more young people would be able to identify what they like and are good at and explore a range of pathways.

Greater linking of subjects to careers and support to engage in workplace learning would provide young people with insights into how their skills and interests link to careers. They could then use this information to find pathways.

This approach requires prioritisation of career education in the curriculum and resourcing to support all teachers to include career-related learning in their subjects in addition to ensuring every young person can access a trained career practitioner.

Recommendation 2) Schools should use alumni and industry peers to provide relatable information to young people.

Linking to the importance of hot knowledge, our study suggests that warm knowledge, delivered by people like them but not immediate peers or family members, would support young people in making more informed decisions about their future pathways. The young people suggested having people like them, recent school leavers that are in industry, TAFE or university, return to school and host talks to demystify what these destinations are like and to provide information relevant to future careers and pathways. They felt that recent school leavers, rather than university lecturers, would be more relatable and be able to share information on what the transition feels like and what to expect in tertiary education. This could have an added benefit in increasing preparedness for further studies.

Recommendation 3) Schools should build parents' knowledge and understanding of alternative pathways from school to further education by showcasing a range of student success stories.

Warm knowledge may help to educate parents and demystify alternative pathways. Parents and carers continue to have a primary influence on young people's pathways – many young people aspire to careers held by parents and other family members and are strongly encouraged and led by parent advice. However, many young people in our study found that their parents did not understand how pathways into university and a range of careers work or provided them with a narrow source of advice.

Parents need to be part of the career information conversation to learn how school and careers are changing. Parents would benefit from exposure to greater knowledge and understanding of alternative pathways.

Showcasing alternative pathways success stories to parents was seen as crucial, as parents need to see that all pathways are safe to support their children to pursue them. The young people in our study point to the need to 'sell' the success of alternative pathways. They felt if students who had achieved success in alternative pathways could return to their school and speak to students and parents, this would expand understanding and relieve parent fears about alternative pathways. This could help reframe pathways from being a second chance 'alternative' to a different, equal manner for young people to achieve their career goals.

The young people suggested that COVID-19 related pivots to remote learning had shown that parents could be more readily engaged remotely than at a school event. This could be part of the solution to engaging parents reluctant or too time-poor to step into a school. Providing online sessions could be a way for schools to engage parents after hours in career conversations and to hear from students who achieved success in different paths.

Recommendation 4) Universities should personalise their information by utilising peers and technology to support connection.

The young people we heard from commented that technology could expand the reach of universities. Young people in focus groups had at most spoken to representatives from a single university, which was the closest university and most often in a partnership or outreach arrangement with the school. They suggested alternatives to enable more universities and more faculties to reach them effectively.

Universities and TAFEs should draw on existing students to provide warm knowledge to help young people understand pathways. All students in our study suggested having people like them, recent school leavers that are in TAFE or university, to demystify what these destinations are like and to provide information relevant to future careers and pathways.

University students from various faculties would ideally host open forums where interested young people could drop in and hear about pathways from people like them rather than navigating university websites or hearing generic university information in open days. Based on our research, young people are seeking personalised information – to be able to reach out to people like them and to hear success stories from students. They find the current broad information sessions to be disempowering and overwhelming – open days are preferred where students know and attend these and can talk to current students one-on-one. Some universities provide mentors to outreach high schools, which provide a vital link and source of information.

Conclusion

This research has sought to uncover why some students have a strong understanding of alternative pathways while others do not. This project was conceived before the advent of COVID-19, and the challenges of the pandemic have impacted the primary data collection for this work. However, the importance of exploring non-ATAR pathways has only increased with an acceleration in early offers in 2021.

As the pandemic continues into a second year, with little end in sight, many young people are likely to experience the mental health consequences of the pandemic and by the disruption to both their formal schooling and social learning. This is an impact likely to be felt for many years to come, not just by those currently undertaking their final years of schooling.

The pandemic has accelerated calls for a different approach to end-of-school assessment and necessitated experiments in this direction. As that shift occurs, the importance of understanding more about alternative entry to vocational and higher education will only heighten.

Through surveys and focus groups, we have gained insights into what supports young people to understand their pathways and what would work better.

Returning to the original research question, we cannot confirm with assurance why some students know about alternative pathways. Our research showed some cohorts who are the subject of university outreach know about pathways, even if they do not intend to use them. We found that knowledge of alternative pathways remains largely hidden – and brought out in times of need. Young people themselves are spreading the news of pathways by engaging with peers who have undertaken different pathways or talking to teachers about their path to teaching. This is likely to vary depending on the school and sector – both comprehensive schools included academic streams highly focused on the ATAR and perhaps less likely to discuss alternative entry. Other schools, and networks of schools, are now tailoring their curriculum and assessment to support alternative entry.

Further qualitative research with university students in alternative pathway programs could provide insights on what types of information, and when, convinced students to investigate and pursue an alternative pathway, including the relative roles of the push away from ATAR and potential pull to alternative forms of assessment or work.

The research reveals a significant gap in access to career information and workplace engagement. All young people want more knowledge earlier on. Information about careers and pathways is not provided until it is often too late and even understandings of ATAR are limited. Some students, particularly those disengaged or in a vocational learning stream, may receive more advice and engage in structured workplace learning. Further research into what types of information works, when, and at scale would be beneficial as the challenge remains in scaling small pockets of good practice.

Parents need to be involved as the research overwhelmingly shows they are young people's first and most influential advisors. To ensure understanding of alternative pathways is dispersed, parents must be supported to acquire greater knowledge and understanding, and importantly, they must see success stories from their community. All pathways should be showcased as equal and capable of supporting young people to succeed.

Young people are craving more personalised information rather than mass university information sessions; young people would welcome the opportunity to meet with current students in their faculty of interest and visit university faculties to demystify university. They want to hear from people like them and learn about what studying at university is like.

The research confirmed that young people most confident in their pathways were those who successfully triangulated information from their social or work network, parents, school, industry, and higher education providers to validate their paths.

The variety of paths makes it difficult for schools and career advisors to provide information on many options. However, young people can be supported to discover what they like and are good at, the careers this can lead to, and can also be supported to consider a variety of paths to achieve their ambition.

By starting early, involving parents, showcasing success through a range of paths and providing warm knowledge by promoting a range of alumni experiences, young people would have access to a broader range of information and people to support them to more successfully navigate the myriad of goat tracks and pathways.

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